

106TH CONGRESS  
2D SESSION

# H. R. 4491

To authorize appropriations for fiscal years 2001 and 2002 for the National Science Foundation, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

MAY 18, 2000

Mr. SMITH of Michigan introduced the following bill; which was referred to the Committee on Science

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## A BILL

To authorize appropriations for fiscal years 2001 and 2002 for the National Science Foundation, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. SHORT TITLE.**

4       This Act may be cited as the “National Science  
5       Foundation Authorization Act of 2000”.

6       **SEC. 2. AUTHORIZATION OF APPROPRIATIONS.**

7       (a) FISCAL YEAR 2001.—

8               (1) IN GENERAL.—There are authorized to be  
9       appropriated to the National Science Foundation  
10       \$3,773,710,000 for fiscal year 2001.

1           (2) SPECIFIC ALLOCATIONS.—Of the amount  
2           authorized under paragraph (1)—

3                   (A) \$2,813,500,000 shall be made avail-  
4           able to carry out Research and Related Activi-  
5           ties, of which—

6                           (i) \$480,560,000 shall be made avail-  
7           able for Biological Sciences;

8                           (ii) \$9,770,000 shall be made avail-  
9           able for Computer and Information Science  
10          and Engineering;

11                          (iii) \$403,650,000 shall be made  
12          available for Engineering;

13                          (iv) \$549,730,000 shall be made avail-  
14          able for Geosciences;

15                          (v) \$807,200,000 shall be made avail-  
16          able for Mathematical and Physical  
17          Sciences;

18                          (vi) \$159,790,000 shall be made avail-  
19          able for Social, Behavioral, and Economic  
20          Sciences;

21                          (vii) \$220,970,000 shall be made  
22          available for United States Polar Research  
23          Programs;

1 (viii) \$62,600,000 shall be made avail-  
2 able for United States Antarctic Logistical  
3 Support Activities; and

4 (ix) \$119,230,000 shall be made avail-  
5 able for Integrative Activities;

6 (B) \$726,700,000 shall be made available  
7 for Education and Human Resources, of which  
8 \$53,080,000 shall be for Graduate Research  
9 Fellowships;

10 (C) \$65,340,000 shall be made available  
11 for Major Research Equipment, of which—

12 (i) \$17,440,000 shall be made avail-  
13 able for the EarthScope;

14 (ii) \$16,400,000 shall be made avail-  
15 able for the Large Hadron Collider;

16 (iii) \$6,000,000 shall be made avail-  
17 able for Millimeter Array;

18 (iv) \$12,000,000 shall be made avail-  
19 able for the National Ecological Observ-  
20 atory Network; and

21 (v) \$13,500,000 shall be made avail-  
22 able for the South Pole Station;

23 (D) \$160,890,000 shall be made available  
24 for Salaries and Expenses, of which—

1 (i) \$4,000,000 shall be made available  
2 for travel for Research and Related Activi-  
3 ties;

4 (ii) \$310,000 shall be made available  
5 for travel for Education and Human Re-  
6 sources;

7 (iii) \$159,000 shall be made available  
8 for travel for Budget, Finance, and Award  
9 Management;

10 (iv) \$182,000 shall be made available  
11 for travel for Information and Resources  
12 Management;

13 (v) \$358,468 shall be made available  
14 for travel for the Office of the Director;  
15 and

16 (vi) \$1,075,000 shall be made avail-  
17 able for ethics activities under section 6;  
18 and

19 (E) \$6,280,000 shall be made available for  
20 the Office of Inspector General.

21 (3) TRAVEL LIMITATION.—None of the funds  
22 authorized by this subsection may be used for travel  
23 expenses except as provided in paragraph (2)(D)(i)  
24 through (v). None of the funds authorized by clauses  
25 (i) through (iv) of paragraph (2)(D) may be used for

1 travel expenses for personnel in the Office of the Di-  
2 rector.

3 (b) FISCAL YEAR 2002.—

4 (1) IN GENERAL.—There are authorized to be  
5 appropriated to the National Science Foundation  
6 \$3,887,291,000 for fiscal year 2002.

7 (2) SPECIFIC ALLOCATIONS.—Of the amount  
8 authorized under paragraph (1)—

9 (A) \$2,880,683,000 shall be made avail-  
10 able to carry out Research and Related Activi-  
11 ties, of which—

12 (i) \$492,035,000 shall be made avail-  
13 able for Biological Sciences;

14 (ii) \$10,003,000 shall be made avail-  
15 able for Computer and Information Science  
16 and Engineering;

17 (iii) \$413,289,000 shall be made  
18 available for Engineering;

19 (iv) \$562,857,000 shall be made avail-  
20 able for Geosciences;

21 (v) \$826,475,000 shall be made avail-  
22 able for Mathematical and Physical  
23 Sciences;

1 (vi) \$163,606,000 shall be made avail-  
2 able for Social, Behavioral, and Economic  
3 Sciences;

4 (vii) \$226,246,000 shall be made  
5 available for United States Polar Research  
6 Programs;

7 (viii) \$64,095,000 shall be made avail-  
8 able for United States Antarctic Logistical  
9 Support Activities; and

10 (ix) \$122,077,000 shall be made avail-  
11 able for Integrative Activities;

12 (B) \$744,422,000 shall be made available  
13 for Education and Human Resources, of which  
14 \$54,400,000 shall be for Graduate Research  
15 Fellowships;

16 (C) \$90,000,000 shall be made available  
17 for Major Research Equipment, of which—

18 (i) \$28,460,000 shall be made avail-  
19 able for the EarthScope;

20 (ii) \$16,900,000 shall be made avail-  
21 able for the Large Hadron Collider; and

22 (iii) \$20,000,000 shall be made avail-  
23 able for the National Ecological Observ-  
24 atory Network;

1 (D) \$165,756,000 shall be made available  
2 for Salaries and Expenses, of which—

3 (i) \$4,095,200 shall be made available  
4 for travel for Research and Related Activi-  
5 ties;

6 (ii) \$317,400 shall be made available  
7 for travel for Education and Human Re-  
8 sources;

9 (iii) \$162,800 shall be made available  
10 for travel for Budget, Finance, and Award  
11 Management;

12 (iv) \$186,400 shall be made available  
13 for travel for Information and Resources  
14 Management;

15 (v) \$370,000 shall be made available  
16 for travel for the Office of the Director;  
17 and

18 (vi) \$1,075,000 shall be made avail-  
19 able for ethics activities under section 6;  
20 and

21 (E) \$6,430,000 shall be made available for  
22 the Office of Inspector General.

23 (3) TRAVEL LIMITATION.—None of the funds  
24 authorized by this subsection may be used for travel  
25 expenses except as provided in paragraph (2)(D)(i)

1 through (v). None of the funds authorized by clauses  
2 (i) through (iv) of paragraph (2)(D) may be used for  
3 travel expenses for personnel in the Office of the Di-  
4 rector.

5 (c) LIMITATION.—Funds made available pursuant to  
6 subsections (a) and (b) shall not be used to employ more  
7 than 75 full-time equivalent positions in the Office of the  
8 Director for either fiscal year 2001 or 2002.

9 **SEC. 3. PLANT GENOMICS.**

10 (a) PLANT GENOME AND GENE EXPRESSION RE-  
11 SEARCH AND DEVELOPMENT CENTERS.—The National  
12 Science Foundation is authorized to make grants for the  
13 establishment of regional plant genome and gene expres-  
14 sion research and development centers, the purpose of  
15 which shall be to—

16 (1) develop capabilities in basic plant genome  
17 research;

18 (2) extend basic plant genomics research  
19 through plant breeding programs and accelerate its  
20 application to crop improvement, particularly the de-  
21 velopment and testing of new varieties of enhanced  
22 food crops; and

23 (3) serve as centers for scientific and safety in-  
24 formation on plant genomics.

1 (b) GRANT AWARDS.—Grant awards under this sec-  
 2 tion shall be made through an open, peer-reviewed com-  
 3 petition. When making awards, the National Science  
 4 Foundation shall ensure that as many different agronomic  
 5 environments as possible are represented.

6 (c) MATCHING FUNDS.—The National Science Foun-  
 7 dation shall not provide under this section more than 50  
 8 percent of the cost of establishing any research and devel-  
 9 opment center.

10 (d) AVAILABILITY OF FUNDS.—The National Science  
 11 Foundation may use up to—

12 (1) \$3,000,000 of the funds authorized by sec-  
 13 tion 2(a)(2)(A)(i) for fiscal year 2001; and

14 (2) \$3,100,000 of the funds authorized by sec-  
 15 tion 2(b)(2)(A)(i) for fiscal year 2002,

16 to carry out this section.

17 **SEC. 4. RESEARCH ON LEARNING.**

18 (a) RESEARCH ON LEARNING.—

19 (1) IN GENERAL.—The National Science Foun-  
 20 dation shall make grant awards to support research  
 21 on learning focusing on the following 4 areas:

22 (A) Brain research as a foundation for re-  
 23 search on human learning.

24 (B) Behavioral, cognitive, affective, and so-  
 25 cial aspects of human learning.

1 (C) Science, mathematics, engineering, and  
2 technological learning in formal and informal  
3 educational settings.

4 (D) Learning in complex educational sys-  
5 tems.

6 The goals of this research shall be to integrate sci-  
7 entific disciplines into research on learning, to gain  
8 a better understanding of how research and edu-  
9 cational practice can be reconciled, and to test,  
10 evaluate, and refine hypotheses across disciplines.

11 (2) AVAILABILITY OF FUNDS.—Of the amounts  
12 authorized under section 2(a)(1) and (b)(1),  
13 \$25,000,000 for fiscal year 2001 and \$29,000,000  
14 for fiscal year 2002 shall be available for carrying  
15 out this subsection.

16 (b) ESTABLISHMENT OF RESEARCH ON LEARNING  
17 CENTERS.—

18 (1) ESTABLISHMENT.—The National Science  
19 Foundation shall make grants for the establishment  
20 of centers of research on learning. The purpose of  
21 these centers shall be to bring together multidisci-  
22 plinary teams of researchers to support the research  
23 goals described in subsection (a)(1). Grant awards  
24 under this subsection shall be made through an  
25 open, peer-reviewed competition.

1           (2) AVAILABILITY OF FUNDS.—Of the amounts  
2       authorized under section 2(a)(1) and (b)(1),  
3       \$6,000,000 for fiscal year 2001 and \$6,000,000 for  
4       fiscal year 2002 shall be available for carrying out  
5       this subsection.

6       (c) INTERAGENCY EDUCATION RESEARCH INITIA-  
7       TIVE.—

8           (1) PARTICIPATION.—The National Science  
9       Foundation is authorized to participate in the Inter-  
10      agency Education Research Initiative.

11          (2) AVAILABILITY OF FUNDS.—Of the amounts  
12      authorized under section 2(a)(1) and (b)(1),  
13      \$25,000,000 for fiscal year 2001 and \$28,000,000  
14      for fiscal year 2002 shall be available for carrying  
15      out this subsection.

16      (d) RESEARCH ON LEARNING CONFERENCE.—With-  
17      in 6 months after the date of the enactment of this Act,  
18      the National Science Foundation shall sponsor a con-  
19      ference on human learning and education research, the  
20      goal of which shall be to bring together researchers from  
21      many disciplines, including the physical sciences, neuro-  
22      logical sciences, social sciences, and education practi-  
23      tioners. The purposes of that conference shall be to review  
24      past research on learning, assess current research efforts,  
25      and develop recommendations to address outstanding re-

1 search issues and to disseminate research results to edu-  
2 cation practitioners.

3 **SEC. 5. INTERGOVERNMENTAL PERSONNEL ACT ASSIGN-**  
4 **EES.**

5 The National Science Foundation shall not, after the  
6 date of the enactment of this Act, enter into an arrange-  
7 ment under the Intergovernmental Personnel Act of 1970  
8 for the detail of any of its employees to locations other  
9 than National Science Foundation facilities.

10 **SEC. 6. ETHICS PROGRAM.**

11 (a) ESTABLISHMENT.—The Director of the National  
12 Science Foundation shall establish a program providing  
13 for—

14 (1) an external review of the ethics rules and  
15 procedures of the National Science Foundation;

16 (2) after completion of the external review  
17 under paragraph (1), a revision of those rules and  
18 procedures as appropriate; and

19 (3) training of all National Science Foundation  
20 employees on the ethics rules and procedures as re-  
21 vised under paragraph (2).

22 (b) REPORTS TO CONGRESS.—The Director of the  
23 National Science Foundation shall report to the Com-  
24 mittee on Science of the House of Representatives, and  
25 to the Committee on Health, Education, Labor, and Pen-

1 sions and the Committee on Commerce, Science, and  
2 Transportation of the Senate, at least once every 6 months  
3 on—

4 (1) the number of National Science Foundation  
5 employees trained pursuant to subsection (a)(3); and

6 (2) the number and type of ethics violations de-  
7 termined under the rules and procedures of the Na-  
8 tional Science Foundation to have occurred, along  
9 with a description of the resolution thereof.

10 **SEC. 7. TECHNICAL AMENDMENTS.**

11 The National Science Foundation Act of 1950 is  
12 amended—

13 (1) in section 3(b) (42 U.S.C. 1862(b)), by  
14 striking “including the Office of Technology Assess-  
15 ment,”

16 (2) in section 5(e)(2) (42 U.S.C. 1864(e)(2)),  
17 by striking “Labor and Human Resources” and in-  
18 serting “Health, Education, Labor, and Pensions”;  
19 and

20 (3) in section 13(a) (42 U.S.C. 1872(a)), by  
21 striking “or the affidavit of allegiance to the United  
22 States required by section 15(d)(2) of this Act”.

23 **SEC. 8. REPORTS ELIMINATION.**

24 Section 3003(a)(1) of the Federal Reports Elimini-  
25 nation and Sunset Act of 1995 (31 U.S.C. 1113 note)

1 does not apply to any report required to be submitted  
2 under any of the following provisions of law:

3 (1) Section 4(j)(1) of the National Science  
4 Foundation Act of 1950 (42 U.S.C. 1863(j)(1)).

5 (2) Section 36(f) of the Science and Engineer-  
6 ing Equal Opportunities Act (42 U.S.C. 1885c(f)).

7 (3) Section 37 of the Science and Engineering  
8 Equal Opportunities Act (42 U.S.C. 1885d).

9 (4) Section 108 of the National Science Foun-  
10 dation Authorization Act for Fiscal Year 1986 (42  
11 U.S.C. 1886).

12 (5) Section 101(a)(3) of the High-Performance  
13 Computing Act of 1991 (15 U.S.C. 5511(a)(3)).

14 (6) Section 3(a)(7) and (f) of the National  
15 Science Foundation Act of 1950 (42 U.S.C.  
16 1862(a)(7) and (f)).

17 (7) Section 7(a) of the National Science Foun-  
18 dation Authorization Act, 1977 (42 U.S.C. 1873  
19 note).

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